An-Najah National University
Faculty of Engineering and IT

Faculty of Engineering & Information Technology
Quality and Accreditation Unit
ABET Center

جامعة النجاح الوطنية
كلية الهندسة وتكنولوجيا المعلومات

Cover page

Project title: Milkshake Machine   Academic Year: 2024

Group Members: Eba Khalil   Department Name: Computer Engineering

Samah Sheeha

Project Type   Hardware

Supervisor Name: Dr. Abdallah Rashed

Format:

> ➢ Single space, Times New Roman.
> ➢ 12 pt,
> ➢ Maximum 1 page.

Abstract Body:

Items must be provided in the Abstract:

> ➢ Why do you think this project is important? Please explain the significance of this
>
> Project in brief.
>
> ➢ In your point of view what are the important aspects that should be covered in the project?
> ➢ Objective(s): In your view, please explain the main objectives of the project.
> ➢ Methodology: Give a brief outline of the application development process.
> ➢ Had this project been done before? Are there any similar applications available today?
> ➢
> ➢ **Note:** Please deliver this abstract early to ensure that your Project has been approved by the department's projects committee. **<u>Registration will not be done without this approval.</u>**

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Project's Abstract:

In the traditional world of milkshake making, the process usually requires significant manual effort. Our project introduces an innovative, tech-savvy solution to streamline and enhance this process. By leveraging advanced technology, we aim to automate the milkshake-making process, making it faster and more efficient. This new approach addresses the challenges of manual methods, providing a smoother and more enjoyable milkshake-making experience. Our project integrates mechanical automation with user-friendly digital controls to create a top-tier milkshake production system.

First, we will design and build the main components of the milkshake production line to ensure it can produce high-quality milkshakes. Our system will automate the addition of ingredients based on the selected flavor—Oreo, strawberry, or blueberry—mix them thoroughly, and pour the finished milkshake into a cup on the conveyor belt. An interactive interface with a keypad and LCD, as well as a mobile app, will allow users to choose their preferred flavor.

The process begins with the user selecting their desired milkshake flavor through the mobile app or the keypad. The system will then dispense the appropriate ingredients into the blender, mix them to perfection, and pour the final product into the cup. The LCD screen will display the status of the order, ensuring a consistent and delightful user experience.